



Introductory Remarks to Symposium 26

Neural mechanisms of social decision-making

Igor Kagan and Arezoo Pooresmaeili, Göttingen

Adaptive decision-making is at the core of successful life, as an individual and a member of a group. In highly social and intricately hierarchical species such as rodents, non-human primates and humans, decisions must incorporate not only the perceptual and value-based contingencies for oneself, but also social factors such as presence, motivations and actions of conspecifics, as well as outcomes for others. Although there are many differences between human and non-human cognition and social interactions, studying social decisions in animals provides unique opportunities to investigate neurophysiological mechanisms underlying basic social behaviors, and compare them to human decision-making. This symposium brings together leading experts whose work is on the foreground of elucidating neural mechanisms underlying social decision-making, in rodents, nonhuman primates and humans. The speakers in the symposium address different facets of social interactions, taking complimentary perspectives on social behaviors along phylogenetic history. Tobias Kalenscher (Düsseldorf, Germany) will present lesion and psychopharmacological data highlighting the importance of amygdala in developing preferences about reward outcomes for other group members, in rats. Steve Chang (New Haven, USA) will demonstrate how neuronal interactions between prefrontal cortex and amygdala contribute to active facial perception via socially-driven eye movements in macaques. Alan Sanfey (Nijmegen, Netherlands) will talk about how social motivations beyond economic utility drive human choices and social preferences such as reciprocity. Together, these presentations will provide an exciting comparative overview of the burgeoning field of social decision-making across species, promoting the idea that complex neural processing in social species can only be fully understood in the context of social cognition that shaped the underlying brain circuits.

Symposium 26

Friday, March 22, 2019
14:30 - 16:30, Lecture Hall 10

Chairs: Igor Kagan and Arezoo Pooresmaeili,
Göttingen

- 14:30 **Opening Remarks**
- 14:35 Tobias Kalenscher, Düsseldorf
NEURAL MECHANISMS OF SOCIAL
PREFERENCES IN RATS (S26-1)
- 15:05 Steve Chang, New Haven, USA
THE COORDINATED INTERPLAY BETWEEN
PREFRONTAL AREAS AND AMYGDALA IN
SOCIAL GAZE DYNAMICS AND DECISION-
MAKING (S26-2)
- 15:35 Alan G. Sanfey, Nijmegen, The Netherlands
RECIPROCITY AND PUNISHMENT: INSIGHTS
FROM DECISION NEUROSCIENCE (S26-3)
- 16:05 Anne Christin Saulin, Würzburg
HOW MULTIPLE MOTIVES AFFECT THE COM-
PUTATION OF SOCIAL DECISIONS IN THE
HUMAN BRAIN (S26-4)
- 16:15 Caedyn Lachlan Stinson, Berlin
THE ROLE OF DIFFERENTIAL SENSORY INPUT
AND ATTRIBUTIONAL BIASES IN SOCIAL
EFFORT PERCEPTION (S26-5)
- 16:25 **Concluding Remarks**